

REMARKS

Claims 6-10 are pending in the application. Claims 6-7 were rejected under 35 U.S.C. § 103(a) based on U.S. Patent No. 4,268,247 to Freze in view of U.S. Patent 4,326,342 to Schregenberger. Claims 6-7 were rejected under 35 U.S.C. § 103(a) based on U.S. Patent No. 4,549,362 to Haried in view of Schregenberger. Claims 6-7 were rejected under 35 U.S.C. § 103(a) based on German Patent No. DE 2220425 to Heissmeeier et al. ("Heissmeier") in view of Schregenberger. Claims 6-10 were rejected under 35 U.S.C. § 103(a) based on Freze in view of U.S. Patent No. 3,538,614 to Weimer et al. ("Weimer"). Claims 6-10 were rejected under 35 U.S.C. § 103(a) based on Haried in view of Weimer. Claims 6-10 were rejected under 35 U.S.C. § 103(a) based on Heissmeier in view of Weimer.

Reconsideration of the Application in view of the above amendments and following remarks is respectfully requested.

Supplemental Information Disclosure Statement

A Supplemental Information Disclosure Statement is submitted herewith for the Examiner's consideration.

Rejections Under 35 U.S.C. § 103

Claims 6-7 were rejected under 35 U.S.C. § 103(a) based on U.S. Patent No. 4,268,247 to Freze in view of U.S. Patent 4,326,342 to Schregenberger. Claims 6-7 were rejected under 35 U.S.C. § 103(a) based on U.S. Patent No. 4,549,362 to Haried in view of Schregenberger. Claims 6-7 were rejected under 35 U.S.C. § 103(a) based on German Patent No. DE 2220425 to Heissmeeier et al. ("Heissmeier") in view of Schregenberger. Claims 6-10 were rejected under 35 U.S.C. § 103(a) based on Freze in view of U.S. Patent No. 3,538,614 to Weimer et al. ("Weimer"). Claims 6-10 were rejected under 35 U.S.C. § 103(a) based on Haried in view of Weimer. Claims 6-10 were rejected under 35 U.S.C. § 103(a) based on Heissmeier in view of Weimer.

Freze describes a dryer that includes a burner 36 and a damper 30 that controls the exhaust of gas through a discharge passage 38. During the drying mode, the damper 30 may be opened "very slightly" in order to maintain relative humidity of the drying gas. See Freze, column 5, lines 16-22 and Fig 1.

Schregenberger describes an oven that includes a fume incinerator 14, a pressure sensing device 25 that measures the pressure of hot gas flowing from the fume incinerator, and a damper 26 in the inlet conduit 13 which diverts some of the hot gas from the fume incinerator to ambient. See Schregenberger, column 4, lines 5-10 and Fig. 1. The sensor actuates operation of the damper if the gas pressure varies from the desired norm. See Schregenberger, column 4, lines 19-26.

Haried describes a fabric dryer with a heater chamber 40, and fresh air and exhaust dampers 34 and 36 that are linked by a mechanism. The dampers are exhausted simultaneously to open or close both dampers by the same amount, such that the exhaust air and the fresh air are of the same volume. See Haried, column 5, lines 39-56 and Fig. 1.

Heissmeier describes a dryer with an exhaust damper 9 and a fresh air damper 10. Heissmeier further shows that the fresh air damper is open when the exhaust damper is open.

Weimar describes a furnace with a fan damper 48 providing air to a furnace 12 through return duct 46 in response to a pressure-sensing element 58. See Weimar, column 5, lines 31-52 and Fig. 1.

As set forth in the previous response filed January 4, 2008, independent claim 6 of the present application recites a method including "controlling the flow dividing device . . . to continue a drying process at a reduced volumetric flow rate of the drying air through the drying chamber." Neither the previous Office Action nor the present Office Action has provided any indication that this feature is taught or suggested by any of the references. Indeed, it is respectfully submitted that none of the cited references teach or suggest continuing a drying process at a reduced volumetric flow rate. Thus, it is respectfully submitted that any combination of the cited references, to the extent proper, could not render claim 6 or its dependent claim 7 obvious.

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Further, independent claims 6 recites “a process air circuit including a fresh air supply passageway and an exhaust air discharge passageway” and “a flow dividing device in the process air circuit configured to divide, into an exhaust air component and a recirculated air component, a flow of the drying air. Claim 6 also recites “evaluating the at least one of the pressure and the pressure profile” and “controlling the flow dividing device based on the evaluating so as to reduce or set to zero the recirculated air component.” Similarly, independent claim 8 recites “a fresh air supply passageway” and “a flow dividing device disposed in the process air circuit and configured to controllably divide a flow of the drying air into an exhaust air component and a recirculated air component, the flow dividing device including a shut-off damper configured to completely or partially close an air path of the recirculated air component based on the measured at least one of a pressure and a pressure profile.” It is respectfully submitted that none of the cited references teach or suggest a dryer with a fresh air supply and controlling a flow dividing device that acts on the drying air flow so as to reduce or set to zero a recirculated air component of the process air based on the measured pressure or pressure profile, as recited. As noted in the Office Action, none of Freze, Haried or Heissmeier disclose completely or partially closing an air path of recirculated air based on a measured pressure or pressure profile. See, Office Action, page 2, lines 13-15, page 4, lines 1-4, and page 5, lines 9-12. Schregenberger describes a damper 26 in the inlet conduit 13 which diverts some of the hot gas from the fume incinerator 14 to ambient. See Schregenberger, column 4, lines 5-10, and Fig. 1. Thus, actuation of the damper 26 in Schregenberger in response to the pressure sensing device 25 affects the entire air flow directed to the oven chamber 8. Weimer describes actuation of a fan damper 48 which provides air to a furnace 12 through return duct 46 in response to a pressure-sensing element 58. See Weimer, column 5, lines 31-52 and Fig. 1. Accordingly, similar to Schregenberger, the control of Weimer’s fan damper in response to the pressure-sensing element affects all of the air being directed to the furnace. In contrast, as recited in claims 6 and 8, the present invention includes a fresh air supply passageway and a flow dividing device that acts on drying air. The flow dividing device divides the drying air into exhaust and recirculated air components. The flow dividing device does not act on the fresh air supply. Thus, in response to the measured pressure or pressure profile, the recirculated air can be reduced without directly affecting the air in the fresh air supply passageway. As a result, as discussed in the present specification at

paragraphs [0004] to [0007], when the flow dividing device is actuated to reduce the recirculated air, the fresh air supply continues to be supplied to the dryer and can prevent overheating within the dryer. It is respectfully submitted that none of the references teach or suggest the recited combination or its advantages. Accordingly, any combination of the cited references, to the extent proper, could not have rendered claims 6 or 8, or their respective dependent claims 7 and 9-11, obvious.

Further, with specific regard to claim 7, this claim recites "reducing a heating power based on the reduced volumetric flow rate of the drying air." It is respectfully submitted that heater power will not be "inherently reduced and affected by variation of incoming fresh make up air" or "outgoing hot exhaust air," as suggested in the Office Action. See Office Action, final sentence of each rejection. Each of the references recite either an electrical heater (Heissmeier) or a burner (Freze, Haried, Schregenberger and Weimer). It is respectfully submitted that none of the cited references anywhere teach or suggest reducing heating power based on volumetric flow rate, as recited in claim 7. Nor would variation of the heating power be inherently reduced, as suggested by the Examiner. It is respectfully requested that the Examiner provide support for this contention. Thus, it is respectfully submitted that, for this additional reason, any combination of the cited references, to the extent proper, could not render claim 7 obvious.

Further, with specific regard to claim 9, this claim recites "the drying chamber includes a rotating drum; the process air circuit includes a stationary heating duct section; and the pressure sensor is disposed in a space between the stationary heating duct section and the rotating drum." It is respectfully submitted that none of the cited references teach or suggest these features, nor are these features addressed in the Office Action. Thus, it is respectfully submitted that, for this additional reason, any combination of the cited references, to the extent proper, could not render claim 9 obvious.

For at least all of the foregoing reasons, the cited references could not render independent claims 6 or 8 or their respective dependent claims 7 and 9-10 obvious.

Withdrawal of the respective rejections of claims 6-10 under 35 U.S.C. § 103(a) based on respective combinations of Freze, Haried and Heissmeier with Schregenberger and Weimer is respectfully requested.

CONCLUSION

In view of the above remarks, applicants believe the pending application is in condition for allowance.

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Respectfully submitted,

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